May 6, 2009

Agency Actions Pursuant to 2010 Great Lakes Restoration Initiative

In May of 2004, Executive Order 13340 established the Great Lakes Interagency Task Force chaired by EPA. Since then, the Task Force has been working to achieve the goals of the Great Lakes Water Quality Agreement through increased collaboration, using existing programs and resource levels. The Task Force also formed a Regional Working Group, which has not only coordinated and made recommendations on how to implement the policies, strategies, projects, and priorities of the Task Force, but has also engaged in extensive outreach and coordination with Great Lakes stakeholders. Meetings were conducted over the course of 2005, involving more than 1,500 people from all levels of government, and nongovernmental organizations, working on the specific issues identified as crucial to the health of the Great Lakes ecosystem. As a result of that work, a final Great Lakes Regional Collaboration Strategy was released in December 2005. That Strategy has since been used to guide federal Great Lakes protection and restoration efforts. Extensive collaboration has continued amongst workgroups spawned by the Strategy. The Interagency Task Force has drawn upon the Strategy and the collaborative efforts and relationships that have continued since its development to develop a Proposed 2010 Great Lakes Restoration Initiative Funding Plan. That Funding Plan represents the federal government's commitment to significantly advance Great Lakes protection and restoration pursuant to that work through the provision of significant new federal resources. There is a broad base of support in the Great Lakes community for this effort.

The Interagency Task Force and the Regional Working Group have drawn extensively upon the foregoing collaborative work in developing the Proposed 2010 Great Lakes Restoration Initiative Funding Plan for inclusion in the President's 2010 budget. Through this work, potential funding targets have been identified for the focus area areas and the federal agencies. Final allocations are dependent upon actual appropriations and the development of Interagency Agreements consistent with the principles and criteria of the Initiative. The provisional funding allocation for each of the Agencies and for each of the Focus Areas is:

Summary of FY2010 Provisional Allocations by Focus Areas (thousands of dollars)

Agency	Toxic Substances and Areas of Concern	Invasive Species	Nearshore Health and Nonpoint Source Pollution	Habitat and Wildlife Protection and Restoration	Accountability, Monitoring, Evaluation, Communication, and Partnerships	Totals	% Share
DHS-USCG	$2,850	$4,000				$6,850	1.4%
DOC-NOAA	$2,450	$1,000	$2,720	$15,000	$11,000	$32,170	6.8%
DOD-USACE	$9,996	$3,250	$14,550	$17,600	$500	$45,896	9.7%
DOI-BIA				$3,000		$3,000	0.6%
DOI-NPS	$2,800	$2,738	$1,550	$2,862	$500	$10,450	2.2%
DOI-USFWS	$5,400	$19,859		$32,242		$57,501	12.1%
DOI-USGS	$2,070	$2,338	$2,562	$3,920	$4,090	$14,980	3.2%
DOS-GLFC		$7,000				$7,000	1.5%
DOS-IJC					$300	$300	0.1%
DOT-FHWA				$2,500		$2,500	0.5%
DOT-MARAD		$3,000				$3,000	0.6%
EPA	$113,880	$8,280	$44,807	$18,880	$48,306	$234,153	49.3%
HHS-ATSDR	$5,500					$5,500	1.2%
USDA-APHIS		$3,000				$3,000	0.6%
USDA-NRCS		$1,000	$30,642	$2,000		$33,642	7.1%
USDA-USFS	$2,000	$4,800	$500	$7,258	$500	$15,058	3.2%
Totals	$146,946	$60,265	$97,331	$105,262	$65,196	$475,000	100.0%
% Share	31%	13%	20%	22%	14%	100%	

The following pages identify examples of the principle activities each of the federal agencies propose to initiate in FY2010, using Initiative resources, to advance the goals and objectives of the Great Lakes Restoration Initiative.

U.S. Coast Guard (USCG) - $6.85M

Drawing upon previous collaboration with Great Lakes stakeholders, the Coast Guard has proposed initiating the following activities to advance the Initiative.

Toxic Substances and Areas of Concern
The Coast Guard will work with National Park Service to remove dangerous goods and materials from Great Lakes light houses, including contaminated soils, lead based paints, asbestos, PCBs, and petroleum products. USCG will also create a system that will recover heavy oil from the sea floor, and develop detection and response techniques for oil spills in ice in fresh water.

Invasive Species
The Coast Guard will coordinate with EPA, USFWS, and DOT-MARAD to fund the further development of up to five ballast water treatment systems suitable for fresh water ecosystems by supporting the use of laboratory and ship-board testing, verification of treatment technologies, and coordination with the maritime industry.

Accountability, Monitoring, Evaluation, Communication, and Partnerships
Additional Initiative funding (not included above) will be provided by EPA through an interagency agreement to support participation in planning, coordination, development of measures and outcomes, and reporting on progress pertaining to the Initiative. Activities will include appropriate participation in the Interagency Task Force, Regional Working Group, Binational Executive Committee, Lakewide Management Plan forums, and Remedial Action Plan forums.

National Oceanic and Atmospheric Administration (NOAA) - $32.170M

Drawing upon previous collaboration with Great Lakes stakeholders, NOAA has proposed initiating the following activities to advance the Initiative.

Toxic Substances and Areas of Concern

In collaboration with EPA, USGS and USFWS, the National Oceanic and Atmospheric Administration will provide an important tool to help support AOC restoration projects through the use of NOAA's Query Manager database with sediment-related data from EPA, the Great Lakes States, the USACE, USGS and other federal and Tribal partners to support visualization and spatial analyses. NOAA will expand the Mussel Watch Program to include all AOCs, evaluate recovery, determine effects of contaminants, and screen for emerging contaminants of concern. NOAA will evaluate reproductive effects of PCBs in hatchery sturgeon in AOCs to determine thresholds in tissue that represent unacceptable risk and injury. NOAA will also model atmospheric mercury fate and transport to determine the amount as well as source regions of mercury deposited to the Great Lakes. To inform management interventions in a timely fashion, federal agencies, including EPA, NOAA, USFWS, USGS, ATSDR and the National Park Service will establish an early warning system to detect new toxic threats to the Great Lakes utilizing enhanced monitoring programs.

Invasive Species

The National Oceanic and Atmospheric Administration will research and document taxonomic and life history information for existing and potential Great Lakes invasive species on a readily accessible website. NOAA will also assist in the development of a coordinated monitoring program of high-risk harbors with EPA, USFWS, and USGS, to support the early detection and rapid response to newly-detected invasive species.

Nearshore Health and Nonpoint Source Pollution

To assist environmental and public health officials notify swimmers at coastal beaches when bacteria levels could pose a health threat, NOAA will work with USGS and EPA to create predictive models that may estimate water quality one to two days in advance. NOAA will also assist coastal communities to guide land use policies and it will work with researchers at government agencies and land grant universities to develop indicators for land use and agricultural lands that will allow decision-makers to assess the impact of land use change in the Great Lakes basin.

Habitat and Wildlife Protection and Restoration

NOAA will issue grants to States, Tribes, municipalities and non-governmental organizations that will strategically protect and improve habitat conditions with benefits for Area of Concern and other coastal communities.

Accountability, Monitoring, Evaluation, Communication, and Partnerships

The National Oceanic and Atmospheric Administration will implement strategic components of the Great Lakes Observing System (GLOS), which integrates and coordinates coastal, ship-based, buoy, satellite, and other measurements to provide unique basin-wide assessments of the health of the Great Lakes ecosystem. NOAA, working with USGS and other federal agencies, will develop a federal strategy on the key scientific priorities needed to fully assess the impacts climate change may have on the health of the Great Lakes ecosystem and will better manage those impacts. NOAA will also facilitate the involvement of Sea Grant, university research, and the Coastal Management Programs.

Additional Initiative funding (not included above) will be provided by EPA through an interagency agreement to support participation in planning, coordination, development of measures and outcomes, and reporting on progress pertaining to the Initiative. Activities will include appropriate participation in the Interagency Task Force, Regional Working Group, Binational Executive Committee, Lakewide Management Plan forums, and Remedial Action Plan forums.

U.S. Army Corp of Engineers (USACE) - $45.896M

Drawing upon previous collaboration with Great Lakes stakeholders, USACE has proposed initiating the following activities to advance the Initiative.

Toxic Substances and Areas of Concern

The Corps of Engineers will support legacy and other sediment remediation cleanups with strategic navigational and environmental dredging of contaminated sediments to help restore AOCs and other distressed areas in the Great Lakes. USACE will conduct critical maintenance dredging to achieve minimum functional channel requirement for navigation safety, transportation cost efficiencies, and clean up of harbor contaminated sediments, reducing further spreading of contaminated material. USACE will also conduct pilot- and full-scale demonstrations of promising technologies for remediation of contaminated sediments at AOCs.

Invasive Species

U.S. Army Corps of Engineers (USACE). The Army Corps of Engineers will identify canals and waterways that may spread invasive species between the Great Lakes and the Mississippi River watershed with USGS and adopt early actions to reduce this risk. ACE will also enhance the use of barriers to further reduce Sea Lamprey populations.

Nearshore Health and Nonpoint Source Pollution

To support decision-making by Soil and Water Conservation Districts, local planning organizations, and states, ACOE will develop watershed models to evaluate the impacts of land use practices on the delivery of sediments and nonpoint pollution to Great Lakes tributaries that discharge to Areas of Concern and federal navigation channels. ACOE will also develop and implement a coordinated outreach and education program to increase beneficial use of dredged material as a means for reducing the use of open water disposal and confined disposal facilities in the Great Lakes region.

Habitat and Wildlife Protection and Restoration

USACE will support projects by States, Tribes, and municipalities to protect, restore, and enhance aquatic ecosystems and cultural resources in strategic locations. USACE efforts will support and quantify increased wetland restoration and the opening of additional stream miles for fish passage.

Accountability, Monitoring, Evaluation, Communication, and Partnerships

The USACE will implement watershed studies related to the adaptive management approach recommended by the International Joint Commission (IJC) following the Lake Ontario Reference Study. USACE will also factor in sediment, AOC and coastal data to these studies.

Additional Initiative funding (not included above) will be provided by EPA through an interagency agreement to support participation in planning, coordination, development of

measures and outcomes, and reporting on progress pertaining to the Initiative. Activities will include appropriate participation in the Interagency Task Force, Regional Working Group, Binational Executive Committee, Lakewide Management Plan forums, and Remedial Action Plan forums.

Bureau of Indian Affairs (BIA) - $3M

Drawing upon previous collaboration with Great Lakes stakeholders, BIA has proposed initiating the following activities to advance the Initiative.

Habitat and Wildlife Protection and Restoration
BIA will issue grants to Great Lakes Tribes and tribal organizations that will strategically protect and restore culturally significant native species such as wild rice.

Accountability, Monitoring, Evaluation, Communication, and Partnerships
Additional Initiative funding (not included above) will be provided by EPA through an interagency agreement to support participation in planning, coordination, development of measures and outcomes, and reporting on progress pertaining to the Initiative. Activities will include appropriate participation in the Interagency Task Force, Regional Working Group, Binational Executive Committee, Lakewide Management Plan forums, and Remedial Action Plan forums.

National Park Service (NPS) - $10.450M

Drawing upon previous collaboration with Great Lakes stakeholders, NPS has proposed initiating the following activities to advance the Initiative.

Toxic Substances and Areas of Concern
The National Park Service will identify sources of contamination and remediate and restore affected areas in multiple parks, with a focus on sites of previous light station activity (in collaboration with the USCG), dumps, and fuel spills. NPS will also monitor mercury, lead, DDT, and other contaminants in 6 national parks on the Great Lakes.

Invasive Species
The Park Service will expand outreach and education opportunities for hunters, anglers, boater, and other recreational users with USFWS and USFS, to prevent further introduction and spread of invasive species, and will remove invasives in national parks. NPS will also demonstrate innovative techniques preventing the spread of VHS pathogen and other organisms to National Park resources.

Nearshore Health and Nonpoint Source Pollution
To manage and respond to environmental threats in Great Lakes parks, NPS will develop benthic habitat and shoreline maps and synthesize existing data on local water quality, hydrodynamics, biota, and food web structure, and it will implement recommended actions from Watershed Condition Assessments to remediate stressors. NPS will also document rapid and severe ecological changes to nearshore habitats of Lake Michigan caused by invasive species and identify effective management actions.

Habitat and Wildlife Protection and Restoration
NPS will undertake strategic projects, in collaboration with States, Tribes, municipalities, non-governmental organizations and others to restore sediment transport, beach and nearshore flows; wetlands; streamflow and in-stream habitats; fish spawning habitat; and restoration and protection of native plants. These activities, including the removal of large non-natural obstructions, will be accomplished in some or all of six national parks.

Accountability, Monitoring, Evaluation, Communication, and Partnerships
NPS will collaborate with other governmental and private groups to develop a “Great Lakes Watershed Sustainable Living Program” for protected areas and communities that are “gateways” to national parks. The Program will promote a comprehensive approach to sustainable values and tourism initiatives, and interpret the significance of climate change and stewardship of national park and protected area resources within the basin.

Additional Initiative funding (not included above) will be provided by EPA through an interagency agreement to support participation in planning, coordination, development of measures and outcomes, and reporting on progress pertaining to the Initiative. Activities will

include appropriate participation in the Interagency Task Force, Regional Working Group, Binational Executive Committee, Lakewide Management Plan forums, and Remedial Action Plan forums.

U.S. Fish and Wildlife (USFWS) - $57.501M

Drawing upon previous collaboration with Great Lakes stakeholders, USFWS has proposed initiating the following activities to advance the Initiative.

Toxic Substances and Areas of Concern

The USFWS, in collaboration with EPA, USACE, and NOAA will directly support remedial action plans and guide specific strategies and actions necessary to advance AOCs toward delisting. To preserve associated aquatic habitats and support implementation of on-the-ground habitat restoration, USFWS will assist in optimizing the design of sediment remediation projects under the Great Lakes Legacy Act. In collaboration with USGS, State and local partners, USFWS will implement an early warning program for emerging Great Lakes contaminants in nearshore and tributary areas.

Invasive Species

The USFWS will coordinate with USCG, EPA, and DOT-MARAD on the development of ballast water treatment systems for freshwater ecosystems, including permitting requirements and the verification of treatment technologies. USFWS will establish grant programs for: aquatic invasive species risk assessment, prioritization of integrated pest management methods and new control technologies, and outreach and education. USFWS will also support the development and on-the-ground implementation of state Aquatic Nuisance Species Management Plans and increase oversight of live organism trade in enforcement of the Lacey Act. USFWS will coordinate with EPA, NOAA, and USGS to develop a coordinated monitoring program in high-risk harbors to support the early detection of and rapid response to newly-detected invasive species.

Habitat and Wildlife Protection and Restoration

The USFWS will deliver partnership-based on-the-ground habitat restoration to reconnect aquatic habitats, reduce sediment and nutrient inputs, restore natural hydrologic regimes, improve water quality and increase populations of listed and depleted native Great Lakes fish and wildlife populations such as: lake trout, brook trout, lake sturgeon, and piping plover. The USFWS will support coordinated habitat restoration on a regional level through the Great Lakes Basin Candidate Fish Habitat Partnership and the Landscape Conservation Collaboration, and implement actions identified in species recovery and management plans. The USFWS will expand propagation and assessment efforts for lake trout and sturgeon, and will administer an enhanced grant program under the Great Lakes Fish and Wildlife Restoration Act. The USFWS will also create a common habitat inventory and mapping system through the Service's National Wetlands Inventory that addresses data gaps in our existing knowledge and enhances prediction models. Proposed on-the-ground activities will strengthen resilience within the Great Lakes ecosystem to withstand future stressors, such as climate change.

Accountability, Monitoring, Evaluation, Communication, and Partnerships

Additional Initiative funding (not included above) will be provided by EPA through an interagency agreement to support participation in planning, coordination, development of measures and outcomes, and reporting on progress pertaining to the Initiative. Activities will include appropriate participation in the Interagency Task Force, Regional Working Group, Binational Executive Committee, Lakewide Management Plan forums, and Remedial Action Plan forums.

U.S Geological Survey (USGS) - $14.980M

Drawing upon previous collaboration with Great Lakes stakeholders, USGS has proposed initiating the following activities to advance the Initiative.

Toxic Substances and Areas of Concern

The Geological Survey will conduct new water quality analyses for toxic substances in water and develop loads for streams tributary to the Great Lakes following the National Monitoring Network design. USGS will quantify effects of historical and emerging contaminants on Great Lakes food chains, and evaluate exposure and effects of these contaminants on sentinel indicator species such as birds and amphibians. USGS will also conduct sampling surveys in Lake Michigan and establish the relations between the various chemical forms of mercury and their concentrations in the water column and key trophic levels in the food web.

Invasive Species

The Geological Survey and the USACE will identify other aquatic pathways that may spread invasive species between the Great Lakes and the Mississippi River watersheds and adopt early actions to reduce this risk. USGS will also develop and test control methods for invasive species such as zebra mussels, Asian Carp, and Phragmites.

Nearshore Health and Nonpoint Source Pollution

To forecast the impact of land use changes on species and habitat in the Great Lakes, the Geological Survey will use scaled-down climate change models and link these with ecosystem models to forecast ecosystem responses. USGS will work with NOAA and EPA to create predictive beach models and apply these models to many beaches in the Great Lakes. USGS will also develop watershed models in conjunction with enhanced collection of streamflow and water-quality data from Great Lakes tributaries and groundwater to provide up-to-date estimates of nutrients to nearshore areas.

Habitat and Wildlife Protection and Restoration

The Geological Survey will develop scientifically based techniques and strategies and update models that will provide the highest probability of success for native, endangered, and threatened species restoration; conduct sampling and analyses to provide a more holistic understanding of aquatic food web changes; restore natural hydrological processes in diked coastal wetlands to improve fish and wildlife habitat and ecosystem resiliency; and with partners, construct fish spawning habitat in areas that provide connectivity to appropriate nursery habitat.

Accountability, Monitoring, Evaluation, Communication, and Partnerships

The Geological Survey will develop and implement watershed models and biological indicators for ecosystem management of Great Lakes tributaries and will map groundwater in critical geographic locations (i.e., near selected mines and severe drawdown areas) in the Great Lakes basin. USGS will also provide geospatial information at selected locations, especially Areas of Concern.

Additional Initiative funding (not included above) will be provided by EPA through an interagency agreement to support participation in planning, coordination, development of measures and outcomes, and reporting on progress pertaining to the Initiative. Activities will include appropriate participation in the Interagency Task Force, Regional Working Group, Binational Executive Committee, Lakewide Management Plan forums, and Remedial Action Plan forums.

Great Lakes Fishery Commission (GLFC) - $7M

Drawing upon previous collaboration with Great Lakes stakeholders, the GLFC has proposed initiating the following activities to advance the Initiative.

Invasive Species
The Great Lakes Fishery Commission is developing sea lamprey pheromones as a way to improve the sea lamprey control program. Fiscal 2010 funds would move the pheromone program from development to implementation and ensure that implementation would not reduce existing sea lamprey control efforts. Effective sea lamprey control is a prerequisite to the rehabilitation of the Great Lakes ecosystem.

Habitat and Wildlife Protection and Restoration
Using acoustic telemetry, the Great Lakes Fishery Commission will provide data essential for fishery management that describes the movements of sea lamprey in relation to native Lake Trout and Lake Sturgeon. Fish community objectives will be modified according to the new information. The Commission will take action to accelerate reductions in sea lamprey numbers and to increase self-sustaining populations of native fish.

Accountability, Monitoring, Evaluation, Communication, and Partnerships
Additional Initiative funding (not included above) will be provided by EPA through an interagency agreement to support participation in planning, coordination, development of measures and outcomes, and reporting on progress pertaining to the Initiative. Activities will include appropriate participation in the Interagency Task Force, Regional Working Group, Binational Executive Committee, Lakewide Management Plan forums, and Remedial Action Plan forums.

International Joint Commission (IJC) - $0.3M

Drawing upon previous collaboration with Great Lakes stakeholders, the IJC has proposed initiating the following activities to advance the Initiative.

Accountability, Monitoring, Evaluation, Communication, and Partnerships
The IJC will carry out binational studies or reference(s) on issues that will enhance cooperation with Canadian partners on issues of binational importance for the Great Lakes. Studies will help harmonize U.S. and Canadian objectives and programs under the Great Lakes Water Quality Agreement.

Additional Initiative funding (not included above) will be provided by EPA through an interagency agreement to support participation in planning, coordination, development of measures and outcomes, and reporting on progress pertaining to the Initiative. Activities will include appropriate participation in the Interagency Task Force, Regional Working Group, Binational Executive Committee, Lakewide Management Plan forums, and Remedial Action Plan forums.

U.S. Federal Highway Administration (FHWA) - $2.5M

Drawing upon previous collaboration with Great Lakes stakeholders, the FHWA has proposed initiating the following activities to advance the Initiative.

Habitat and Wildlife Protection and Restoration
The Federal Highway Administration will issue grants to regional, state, local, academic, and non-governmental organizations to implement a scientifically-based, ecosystem approach to habitat, invasive species (terrestrial and aquatic), and water quality in concert with transportation and infrastructure. On-the-ground ecosystem examples could include field plantings and contiguous habitat next to bridges; stormwater and runoff management; fish passage at culverts; and green solutions within built environments and habitats. Cross-cutting integration across focus area areas will blend multiple outcomes for urban and rural watersheds and communities within the Great Lakes basin.

Accountability, Monitoring, Evaluation, Communication, and Partnerships
Additional Initiative funding (not included above) will be provided by EPA through an interagency agreement to support participation in planning, coordination, development of measures and outcomes, and reporting on progress pertaining to the Initiative. Activities will include appropriate participation in the Interagency Task Force, Regional Working Group, Binational Executive Committee, Lakewide Management Plan forums, and Remedial Action Plan forums.

Maritime Administration (MARAD) - $3M

Drawing upon previous collaboration with Great Lakes stakeholders, MARAD has proposed initiating the following activities to advance the Initiative.

Invasive Species
The Department of Transportation's MARAD will coordinate on the development of ballast water treatment suitable for fresh water ecosystems with USCG, EPA, and USFWS, including permitting requirements and the verification of treatment technologies.

Accountability, Monitoring, Evaluation, Communication, and Partnerships
Additional Initiative funding (not included above) will be provided by EPA through an interagency agreement to support participation in planning, coordination, development of measures and outcomes, and reporting on progress pertaining to the Initiative. Activities will include appropriate participation in the Interagency Task Force, Regional Working Group, Binational Executive Committee, Lakewide Management Plan forums, and Remedial Action Plan forums.

U.S. Environmental Protection Agency (EPA) $234.153M

Drawing upon previous collaboration with Great Lakes stakeholders, EPA has proposed initiating the following activities to advance the Initiative.

Toxic Substances and Areas of Concern

The U.S. Environmental Protection Agency will remediate contaminated sediments in AOCs and in other areas affected by contaminated sediments through the Great Lakes Legacy Act and other authorities. EPA will enter into project agreements with and issue grants to States, Tribes, local units of government, as well as others to implement remedial action plans to delist beneficial use impairments in AOCs. EPA will also support pollution prevention programs, provide fish consumption advice, and provide health education to the general public. EPA will accelerate the development of total maximum daily loads (TMDLs) for toxicants in the Great Lakes Basin, including but not limited to PCBs, mercury, dioxin, and pesticides. USEPA will use monitoring programs to measure progress in reducing legacy toxics in Great Lakes fish and air, and conduct surveillance for new toxic substances, in cooperation and collaboration with USGS, NOAA, USFWS, ATSDR as well as States, Tribes and local units of government.

Invasive Species

The Environmental Protection Agency will promote efforts to protect water quality and the Great Lakes ecosystem from the effects of invasive species by coordinating and participating in multi-agency initiatives, and by supporting regional, State and local efforts. EPA will coordinate the development of water treatment technologies suitable for protecting fresh water ecosystems from invasive species in partnership with USCG, USFWS, and DOT-MARAD, including establishing permitting requirements, and by verifying treatment technologies. EPA will also assist in the development of a coordinated monitoring program of high-risk harbors with USFWS, NOAA, USGS, and will also support programs to promote early detection and rapid response to newly-detected invasive species.

Nearshore Health and Nonpoint Source Pollution

EPA will accelerate the development of total maximum daily loads (TMDLs) for nutrients entering Great Lakes tributaries; support implementation of TMDLs and watershed management plans; and provide training, technology transfer and information management systems to support control of nonpoint source pollution. EPA will significantly reduce risk to human health at Great Lakes swimming beaches by promoting the use of Beach Sanitary Surveys and implementing remediation actions to remove sources of bacteria on Great Lakes beaches; identifying new, more rapid methods to assess levels of bacteria at beaches; improving and refining forecasting models for bacteria levels at beaches; and improving communication to assure real-time beach information health is widely available to the public over the internet. EPA will also foster reductions in the number and severity of incidences of nuisance growths of Cladophora, hazardous algal blooms and botulism in the Great Lakes by supporting research and modeling to link watershed events with these nuisance events; implementing watershed management plans

and agricultural best management practices; developing environmental indicators that reflect watershed stressors; and assessing the status and trends of nearshore water conditions along the entire U.S. Great Lakes coast.

Habitat and Wildlife Protection and Restoration

EPA will issue grants for strategic on-the ground habitat protection and restoration projects to States, Tribes, local units of government and others, and will complete blueprints for biodiversity protection and restoration at strategically chosen locations throughout the Great Lakes and Areas of Concern. EPA will collect baseline data for coastal wetlands and further the development of a program to protect and restore coastal wetlands by working with a variety of partners. EPA will also work in partnership to measure progress with regard to habitat and species protection and restoration. Upon completion of selected projects, wetlands, coastal forests, and stream habitats will be protected, restored, or improved.

Accountability, Monitoring, Evaluation, Communication, and Partnerships

EPA will provide overall support and coordination for the Great Lakes Restoration Initiative, providing a point of accountability, and develop mechanisms for reporting on progress, including developing a report to the President. EPA will continue to serve as a central point of management and coordination of the Great Lakes Interagency Task Force and its Regional Working Group, and meet the goals of the Executive Order on the Great Lakes. EPA will implement programs for public participation, outreach and education for the Great Lakes. EPA will serve as the lead Agency to coordinate U.S. government responsibilities to implement the Great Lakes Water Quality Agreement with Canada, and work with the U.S. State Department and other federal agencies to meet the goals of the Agreement. EPA will continue to serve as the lead coordinating agency for the Lakewide Management Plans and work to ensure the achievement of binationally-agreed upon goals, objectives and actions. EPA will enhance existing programs that measure and assess the physical, biological, and chemical integrity of the Great Lakes and fill reporting gaps. Working with NOAA, USGS, USFWS, and other partners, EPA will conduct comprehensive monitoring for the Great Lakes and will implement strategic components of the Great Lakes Observing System (GLOS). This system will integrate and coordinate coastal, ship-based, buoy, satellite, and other measurements to provide unique basin-wide assessments of the health of the Great Lakes ecosystem. EPA will enhance the 2010 National Coastal Assessment of water, sediment quality and biological indicators to include elements specifically related to the Great Lakes system. Grants will be provided to States to perform sampling and analyses. EPA will promote the development and implementation of a system of science-based indicators that will better assess and provide accountability and transparency of actions to improve the health of the Great Lakes ecosystem.

A portion of the Initiative funding (included above) will be provided by EPA through an interagency agreement with other agencies to support their participation in planning, coordination, development of measures and outcomes, and reporting on progress pertaining to the Initiative. Activities will include appropriate participation in the Interagency Task Force, Regional Working Group, Binational Executive Committee, Lakewide Management Plan forums, and Remedial Action Plan forums.

Agency for Toxic Substances and Disease Registry (ATSDR) - $5.5M

Drawing upon previous collaboration with Great Lakes stakeholders, the ATSDR has proposed initiating the following activities to advance the Initiative.

Toxic Substances and Areas of Concern

The Agency for Toxic Substances and Disease Registry will conduct human biomonitoring for environmental contaminants in Great Lakes populations to evaluate current body burdens, compare these to national data, determine direct impacts from other restoration projects through repeat measurements in the future and identify unique exposure pathways. ATSDR will follow up with epidemiological studies as warranted.

Accountability, Monitoring, Evaluation, Communication, and Partnerships

Additional Initiative funding (not included above) will be provided by EPA through an interagency agreement to support participation in planning, coordination, development of measures and outcomes, and reporting on progress pertaining to the Initiative. Activities will include appropriate participation in the Interagency Task Force, Regional Working Group, Binational Executive Committee, Lakewide Management Plan forums, and Remedial Action Plan forums.

Animal and Plant Health Inspection Service (APHIS) - $3M

Drawing upon previous collaboration with Great Lakes stakeholders, APHIS has proposed initiating the following activities to advance the Initiative.

Invasive Species
APHIS will identify the range of important aquatic animal pathogens in the Great Lakes basin by conducting surveillance, developing a sampling strategy and building needed laboratory and IT infrastructure for evaluating the surveillance sampling to be used to develop guidelines or regulations regarding mitigating the spread of the pathogens outside of the known range.

Accountability, Monitoring, Evaluation, Communication, and Partnerships
Additional Initiative funding (not included above) will be provided by EPA through an interagency agreement to support participation in planning, coordination, development of measures and outcomes, and reporting on progress pertaining to the Initiative. Activities will include appropriate participation in the Interagency Task Force, Regional Working Group, Binational Executive Committee, Lakewide Management Plan forums, and Remedial Action Plan forums.

Natural Resources Conservation Service (NRCS) - $33.642M

Drawing upon previous collaboration with Great Lakes stakeholders, the NRCS has proposed initiating the following activities to advance the Initiative.

Invasive Species
The NRCS will increase efforts to reduce terrestrial invasive species which have the potential to impact Great Lakes ecosystem health. Using NRCS's Conservation Technical Assistance Program and Environmental Quality Incentives Program, NRCS will work directly with agricultural producers to implement conservation practices on their operation to reduce terrestrial invasive species.

Nearshore Health and Nonpoint Source Pollution
To reduce soil erosion and nutrient loading to waters of the Great Lakes Basin, NRCS will work directly with agricultural producers, using existing conservation programs, to install conservation practices on their operations; provide grants to local governments and nonprofit organizations; purchase development rights to preserve farmland; and purchase easements to restore floodplain function.
Through existing easement programs, NRCS will:

- Purchase development rights to preserve farmland and ranchland through the Farm and Ranchland Protection Program, and
- Purchase easement to restore floodplain function through the Emergency Watershed Protection—Floodplain Easements Program.

NRCS will provide support for the Great Lakes Basin Program for Soil Erosion & Sediment Control (GLBP). The GLBP is administered by the Great Lakes Commission (GLC) for the United States Department of Agriculture. Millions of dollars are spent each year in the Great Lakes to dredge sediments from harbors, remove it from our drinking water and reduce it in waters of the lakes. Preventative programs such as the Great Lakes Basin Program for Soil Erosion and Sediment Control, which promotes proper land use practices, can substantially reduce these economic and environmental costs at a fraction of the these annual costs.

The program will provide grants to local governments and nonprofit organizations to control erosion and sedimentation and to limit the input of associated nutrients and toxic contaminants to the Great Lakes. It will also inform citizens of the damages caused to the Great Lakes by these pollutants. Since the program's inception in 1991, 406 local projects have been funded. These projects have prevented an estimated 2.1 million tons of soil and 6.5 million pounds of phosphorus from polluting the Great Lakes and tributaries.

Habitat and Wildlife Protection and Restoration
Using NRCS's Conservation Technical Assistance Program, Wildlife Habitat Incentives Program, and Environmental Quality Incentives Program, NRCS will work directly with agricultural producers to implement conservation practices to address habitat and wildlife protection and restoration.
Wildlife Habitat Incentives Program Priorities include:

- Promote the restoration of declining or important native wildlife habitats.
- Protect, restore, develop or enhance wildlife habitat of at-risk species (candidate species, and State and Federally listed threatened and endangered species).
- Reduce the impacts of invasive species on wildlife habitats.
- Protect, restore, develop or enhance declining or important aquatic wildlife species' habitats.

A National Environmental Quality Incentives Program Priority includes:

- Promotion of at-risk species habitat conservation.

Accountability, Monitoring, Evaluation, Communication, and Partnerships

Additional Initiative funding (not included above) will be provided by EPA through an interagency agreement to support participation in planning, coordination, development of measures and outcomes, and reporting on progress pertaining to the Initiative. Activities will include appropriate participation in the Interagency Task Force, Regional Working Group, Binational Executive Committee, Lakewide Management Plan forums, and Remedial Action Plan forums.

U.S. Forest Service (USFS) - $15.058M

Drawing upon previous collaboration with Great Lakes stakeholders, USFS has proposed initiating the following activities to advance the Initiative.

Toxic Substances and Areas of Concern
The Forest Service will protect and restore nearshore, urban and island habitats and address toxic substances in brownfield sites through restoration of green infrastructure, using trees and native vegetation to take up and trap certain toxic substances.

Invasive Species
The Forest Service will expand outreach and education opportunities for hunters, anglers, boater, and other recreational users with USFWS and NPS, to prevent further introduction and spread of invasive species. USFS will work with partners to identify and demonstrate the strategic use of weed management areas to control terrestrial invasive species. USFS will also expand efforts to respond to the Emerald Ash Borer.

Nearshore Health and Nonpoint Source Pollution
Working with federal, state, and local partners, USFS will develop a tool such as a Great Lakes Ecosystem Services Bank to provide a financial benefit to landowners to maintain their forests as forests.

Habitat and Wildlife Protection and Restoration
The Forest Service will work with and issue grants to States, Tribes, and non-governmental organizations to strategically restore national and urban forests; open streams for fish passage; and, restore culturally significant black ash swamps in Tribal areas.

Accountability, Monitoring, Evaluation, Communication, and Partnerships
The Forest Service will analyze forest resources in the Great Lakes region using the Forest Inventory. USFS will also work with the habitat management committees of the LaMPs to address questions relating to critical wildlife habitat goals and objectives, forest cover, diversity, climate change, and current status.

Additional Initiative funding (not included above) will be provided by EPA through an interagency agreement to support participation in planning, coordination, development of measures and outcomes, and reporting on progress pertaining to the Initiative. Activities will include appropriate participation in the Interagency Task Force, Regional Working Group, Binational Executive Committee, Lakewide Management Plan forums, and Remedial Action Plan forums.